

Review of DISCOVER Applications



Janice B. Allen Ph.D.
Scientific Review Administrator

Pre-submission

- Reread all instructions pertaining to RFA and Application Guidelines
- Follow budget restrictions
- Include checklist
- Sign application
- Affix RFA label (available in PHS 398) to bottom of the face page of application

Letters of Intent (LOI)

- Not mandatory nor binding, but **EXTREMELY** helpful
- Due: **October 17, 2006**
- Include:
 - Title
 - Name, address, PI's telephone #, & email address
 - Names of key personnel & participating institutions
 - Number (ES06-001) & title of RFA
 - Information about projects/cores*
- Send to Janice Allen

Submission - November 17, 2006

Center for Scientific Review, NIH – Signed original + 2 copies

Scientific Review Branch (SRB), NIEHS – 3 signed copies

Appendix Materials to SRB, NIEHS – 5 copies, collated by research projects/cores

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Scientific Review Administrator
Scientific Review Branch
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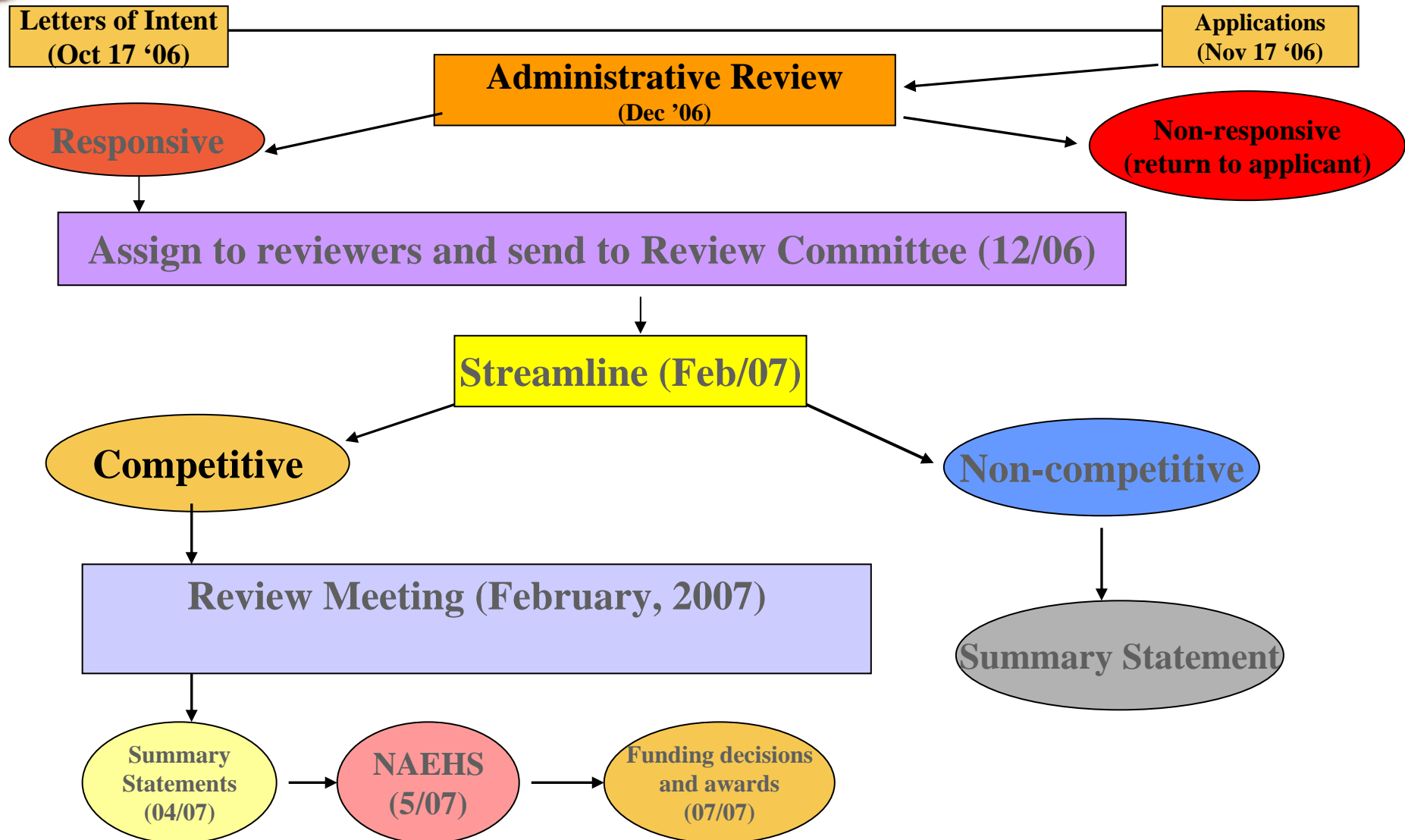
**NIEHS
PO Box 12233 (MD EC-30)
RTP, NC 27709**

Express Delivery:

**79 TW Alexander Drive
Bldg 4401, Room 3173
RTP, NC 27709**

Supplemental material received no later than December 15, 2006

Review of Applications' Timeline



Streamlining of Applications

Purpose: to identify applications that are least likely to be funded so that more time can be spent on the most scientifically meritorious applications

Goal: Identify lower $\frac{1}{3}$ to $\frac{1}{2}$ applications

- Conducted by review committee prior to review
- Decision to “streamline” must be **unanimous**
- Streamlined applications do not get discussed and scored at full review meeting, but do receive a written critique

Know your Audience!

The Reviewers

- Accomplished, dedicated, fair
- Overly committed, tired, inherently skeptical, overly critical
- General understanding only
- Used to reviewing R01 applications

The key to success in grant writing is to engender **enthusiasm** in the reviewer, who then becomes an **advocate** for the proposal!

DISCOVER Review Elements

- **Integrated, Interdisciplinary and Translational Nature of Program**
- **Coordination and Cohesiveness**
- **Center Director**
- **Lead physician scientist**
- **Investigators/Key Personnel**
- **Administrative Core**
- **Minimum of four integrated research projects (identify as basic or clinical)**
- **Facility Cores**

Required in Research Plan

- Protection of Human Subjects from Research Risks (IRB: just-in-time)
- Inclusion of Women, Minorities, and Children in research
- Care and Use of Vertebrate Animals in research (IACUC: just-in-time)
- Data and Resource Sharing plans should be included, or state why data sharing is not possible (not considered a review element)
- Data sharing costs are allowable budget items
- Reviewers will consider the reasonableness of the plan or rationale for not sharing research data

http://grants.nih.gov/grants/policy/data_sharing/index.htm

Scoring...

Components to receive numerical scores

- Research Projects
- Integrated/interdisciplinary/translational nature
- Administrative Core
- Overall Priority

Components to receive descriptors

- Center Director
- Lead Physician Scientist
- Facility Cores

Review Criteria: Research Projects

SIGNIFICANCE:

- Does the study address an important problem?
- If the aims are achieved will scientific knowledge or clinical practice be advanced?
- What will be the effect of these studies on the concepts, methods, technologies, treatments, services, or preventative interventions that drive the field?
- If the study is successful, would it lead to an incremental advance, or would it provide a substantial step forward that would not likely be achieved through mechanisms other than this DISCOVER Center?
- If successful, would the project result in resources that could be translated to improve human health or disease?

Review Criteria: Research Projects

APPROACH

- Are the conceptual or clinical framework, design, methods, and analyses adequately developed, well integrated, and appropriate to the aims of the project?
- Does the applicant acknowledge potential problem areas and consider alternative strategies?
- Is there strong synergy among the combined efforts of various investigators within the DISCOVER Center?
- Is there evidence that environmental health sciences research is well-integrated into the research design?

Review Criteria: Research Projects

INNOVATION:

- Is the project original and innovative?
- Does the project challenge existing paradigms or clinical practice: address an innovative hypothesis or critical barrier to progress in the field?
- Does the project develop or employ novel concepts, approaches, methodologies, tools or technologies for this area of research?

Review Criteria: Research Projects

INVESTIGATORS:

- Are the Investigators appropriately trained and well suited to carry out the proposed work ?
- Is the work proposed appropriate to the experience level of the Principal Investigator and other researchers, including consultants and subcontractors (if any)?
- Does the investigative team (**basic and physician scientists**) bring complementary and integrated expertise to the project?

Review Criteria: Research Projects

ENVIRONMENT:

- Is there sufficient access to resources (e.g., equipment, facilities)?
- Does the scientific and technological environment in which the work will be done contribute to the probability of success?
- Do the proposed experiments take advantage of unique features of the scientific environment, or subject populations or employ useful collaborative arrangements?
- Is there evidence of Institutional support?

Review Criteria: Facility Cores

- Evaluate scope of core, quality of services, cost effectiveness and credentials of personnel.
- Evaluate overall use of cores by each research project to evaluate need for core.
- Evaluate core for its overall importance to Center.
- Will the core contribute to expansion of research into new areas?
- Institutional commitment?
- Assess overall budget to determine if the usage is proportional to support requested?
- Evaluate explanation for prioritization of services.

Review Criteria: Administrative Core

- Plan for effective management.
- Internal plan to promote integration and coordination among projects.
- Plan to develop product development and tech transfer activities.
- Qualifications of administrative staff.
- Plan for use of Internal and External Advisory committees.

Review Criteria: Leadership

Center Director (15% Effort):

- Level of commitment and ability to provide scientific and administrative leadership and direction.
- Experience in coordinating large interdisciplinary research efforts.

Lead Physician-Scientist (15% Effort):

- Ability to provide clinical insight, leadership and direction to research of Center.
- Commitment level and ability to integrate basic mechanistic, clinical and public health research.

Review Criteria: Integrated, Interdisciplinary, and Translational Nature of Program

- What is the strength of the procedures, processes and plans for promoting interdisciplinary interactions, including coordination, interaction, collaboration and synthesis?
- Is the center organized and structured and managed for maximum productivity and interactions?
- Is the overall program novel in its concept and provide innovative approaches?
- How do the cores and individual projects relate to the central theme and the ability to meet long range goals?
- Will the studies facilitate research findings towards the development of improved clinical or public health practice?

Review Criteria: Overall P50 Center

SIGNIFICANCE:

Relevance of the proposed research to human health and disease.

- Development of a well-defined interdisciplinary approach to addressing a central theme.
- Evidence for fostering the advancement of basic science and translation into improved clinical and public health application.

Review Criteria: Overall P50 Center

Coordination and Cohesiveness:

- Integration of administrative core, research projects and facility/service cores.
- Evidence for meaningful interdisciplinary collaboration and synergistic potential between the research projects.

Review Criteria: Overall P50 Center

Resources and Environment:

- Institutional strength , commitment to research and support of the Center.
- Academic and physical environment: space, equipment, research subjects, and materials.

Factors Affecting Overall Score

- Multi- and Interdisciplinary coordination
 - Integration and interaction of basic and clinical sciences
 - Translational potential
- Scientific merit of research projects
- Importance and use of cores
- Coordination and Cohesiveness
- Directors and other key personnel